

# Appendix III

## **Tomales Bay Mooring Criteria GIS Information August, 2007**

### **Definitions used for creating digital maps of protection areas in Tomales Bay**

The following polygon coverages were merged and internal boundaries were dissolved using ArcGIS 9.2 to create a single data set representing protected areas. GIS analysis and cartography was performed by Tim Reed, Marine GIS Analyst for Gulf of the Farallones National Marine Sanctuary, [tim.reed@noaa.gov](mailto:tim.reed@noaa.gov).

#### **1. Point Reyes National Seashore offshore waters.**

'PORE offshore' areas were excerpted from the administrative boundary file provided by National Park Service. Offshore areal extent was trimmed to eliminate areas outside of Tomales Bay. A .25 mile buffer around Hog Island was also added because Hog Island was acquired by Point Reyes National Seashore subsequent to the last update of the boundary file.

#### **2. Areas within 300 feet of seal haulout areas.**

A 300 foot buffer was added to Tomales Bay pinniped haulout locations. Data were provided by the National Park Service.

#### **3. Areas within 100 feet of seagrass beds.**

Seagrass extents from 1992 were merged with updates from 2000, 2001, and 2002 to represent current seagrass beds. (More recent data were not available at the time.) A 100 foot buffer was added. Data were provided by the CA Department of Fish and Game.

#### **4. Areas within 100 feet of aquaculture lease areas.**

Locations and extents of active aquaculture lease areas were provided by the CA Department of Fish and Game. A 100 foot buffer was added.

#### **5. Areas within 100 feet of swimming beaches and boat ramps.**

Point locations of swimming beaches and boat ramps were provided by the National Park Service. 100 foot diameter buffers were added.

#### **6. Areas less than 8 feet deep.**

Areas from 1 foot and 8 feet deep (below MLLW) were calculated from a data set of approximately 25,000 soundings taken during the last two decades and compiled by NOAA and the CA Department of Fish and Game. (Depths less than 1 foot were excluded to keep the shoreline visible.) The 8 foot depth restriction serves as a surrogate for seagrass beds and insures sufficient depth for mooring. It should be noted that this data set represents approximate depth over time at any one particular point and is not a comprehensive bathymetric survey.

#### **7. Areas 1000 feet offshore of State Park lands.**

State Park lands around Tomales Bay were extracted from an administrative boundary file released by CA Parks and Recreation in 2006. A 1000 foot offshore buffer was added extending